

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-55. (Canceled)

56. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

planarizing an insulating film formed over a substrate having an insulating surface;

forming electrodes on the insulating film;

forming an insulating layer so as to cover the electrodes; and

planarizing surfaces of the electrodes and a surface of the insulating layer so that they become flush with each other, thereby filling boundary portions between the electrodes with the insulating layer, with the insulating layer covering at least a channel forming region of a semiconductor element in the semiconductor device.

57. (Previously Presented) The method according to claim 56, wherein mechanical polishing is performed in each of the planarizing steps.

58. (Previously Presented) The method according to claim 56, wherein the insulating layer is light interruptive.

59. (Previously Presented) The method according to claim 56, wherein the insulating layer is an organic resin film in which at least one of a black pigment and a carbon-type material is dispersed.

60. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

planarizing an insulating film formed over a first substrate;

forming striped electrodes on the insulating film;

forming an insulating layer so as to cover the striped electrodes;

planarizing surfaces of the striped electrodes and a surface of the insulating layer so that they become flush with each other, thereby filling boundary portions between the striped electrodes with the insulating layer, with the insulating layer covering at least a channel forming region of a semiconductor element in the semiconductor device; and

forming a liquid crystal layer between the first substrate and a second transparent substrate.

61. (Previously Presented) The method according to claim 60, wherein mechanical polishing is performed in each of the planarizing steps.

62. (Previously Presented) The method according to claim 60, wherein the insulating layer is light interruptive.

63. (Previously Presented) The method according to claim 60, wherein the insulating layer is an organic resin film in which at least one of a black pigment and a carbon-type material is dispersed.

64. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming semiconductor elements over a substrate having an insulating surface;

forming an interlayer insulating film over the semiconductor elements;

planarizing the interlayer insulating film;

forming pixel electrodes that are electrically connected to the respective semiconductor elements on the interlayer insulating film;

forming an insulating layer so as to cover the pixel electrodes; and

planarizing surfaces of the pixel electrodes and a surface of the insulating layer so that they become flush with each other, thereby filling boundary portions between the pixel electrodes with the insulating layer, with the insulating layer covering at least channel forming regions of said semiconductor elements.

65. (Previously Presented) The method according to claim 64, wherein mechanical polishing is performed in each of the planarizing steps.

66. (Previously Presented) The method according to claim 64, wherein the insulating layer is light interruptive.

67. (Previously Presented) The method according to claim 64, wherein the insulating layer is an organic resin film in which at least one of a black pigment and a carbon-type material is dispersed.

68. (Previously Presented) The method according to claim 64, wherein the semiconductor elements are thin-film transistors.

69. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming semiconductor elements arranged in matrix form over a first substrate;

forming an interlayer insulating film over the semiconductor elements;

planarizing the interlayer insulating film;

forming pixel electrodes that are electrically connected to the respective semiconductor elements on the interlayer insulating film;

forming an insulating layer so as to cover the pixel electrodes;

planarizing surfaces of the pixel electrodes and a surface of the insulating layer so that they become flush with each other, thereby filling boundary portions between the pixel electrodes with the insulating layer, with the insulating layer covering at least channel forming regions of said semiconductor elements; and

forming a liquid crystal layer between the first substrate and a second transparent substrate.

70. (Previously Presented) The method according to claim 69, wherein mechanical polishing is performed in each of the planarizing steps.

71. (Previously Presented) The method according to claim 69, wherein the insulating layer is light interruptive.

72. (Previously Presented) The method according to claim 69, wherein the insulating layer is an organic resin film in which at least one of a black pigment and a carbon-type material is dispersed.

73. (Currently Amended) The method according to claim 69, wherein the semiconductor elements are thin-film transistors.

74. (Previously Presented) A method of manufacturing a semiconductor device comprising the steps of:

forming electrodes over a substrate having an insulating surface;

forming a **[[DLC]]** diamond-like carbon film to cover the electrodes;

forming an insulating layer on the **[[DLC]]** diamond-like carbon film; and

planarizing the insulating layer so that a surface of the **[[DLC]]** diamond-like carbon film and a surface of the insulating layer become flush with each other, thereby filling boundary portions between the electrodes with the insulating layer.

75. (Previously Presented) The method according to claim 74, wherein mechanical polishing is performed in the planarizing step.

76. (Previously Presented) The method according to claim 74, wherein the insulating layer is light interruptive.

77. (Previously Presented) The method according to claim 74, wherein the insulating layer is an organic resin film in which at least one of a black pigment and a carbon-type material is dispersed.

78. (Currently Amended) The method according to claim 74, further comprising a step of planarizing the electrodes before the step of forming the **[[DLC]] diamond-like carbon** film.

79. (Currently Amended) The method according to claim 74, wherein the **[[DLC]] diamond-like carbon** film has a thickness of 10 to 50 nm.

80. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming striped electrodes over a first substrate;

forming a **[[DLC]] diamond-like carbon** film to cover the striped electrodes;

forming an insulating layer on the **[[DLC]] diamond-like carbon** film;

planarizing the insulating layer so that a surface of the **[[DLC]] diamond-like carbon** film and a surface of the insulating layer become flush with each other, thereby filling boundary portions between the striped electrodes with the insulating layer; and

forming a liquid crystal layer between the first substrate and a second transparent substrate.

81. (Previously Presented) The method according to claim 80, wherein mechanical polishing is performed in the planarizing step.

82. (Previously Presented) The method according to claim 80, wherein the insulating layer is light interruptive.

83. (Previously Presented) The method according to claim 80, wherein the insulating layer is an organic resin film in which at least one of a black pigment and a carbon-type material is dispersed.

84. (Currently Amended) The method according to claim 80, further comprising a step of planarizing the striped electrodes before the step of forming the **[[DLC]] diamond-like carbon** film.

85. (Currently Amended) The method according to claim 80, wherein the **[[DLC]] diamond-like carbon** film has a thickness of 10 to 50 nm.

86. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming semiconductor elements over a substrate having an insulating surface;

forming pixel electrodes that are electrically connected to the respective semiconductor elements;

forming a **[[DLC]] diamond-like carbon** film to cover the pixel electrodes;

forming an insulating layer on the **[[DLC]] diamond-like carbon** film; and

planarizing the insulating layer so that a surface of the **[[DLC]] diamond-like carbon** film and a surface of the insulating layer become flush with each other, thereby filling boundary portions between the pixel electrodes with the insulating layer.

87. (Previously Presented) The method according to claim 86, wherein mechanical polishing is performed in the planarizing step.

88. (Previously Presented) The method according to claim 86, wherein the insulating layer is light interruptive.

89. (Previously Presented) The method according to claim 86, wherein the insulating layer is an organic resin film in which at least one of a black pigment and a carbon-type material is dispersed.

90. (Previously Presented) The method according to claim 86, wherein the semiconductor elements are thin-film transistors.

91. (Currently Amended) The method according to claim 86, further comprising a step of planarizing the pixel electrodes before the step of forming the **[[DLC]] diamond-like carbon** film.

92. (Currently Amended) The method according to claim 86, wherein the **[[DLC]] diamond-like carbon** film has a thickness of 10 to 50 nm.

93. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming semiconductor elements arranged in matrix form over a substrate;

forming pixel electrodes connected to the respective semiconductor elements, with at least one interlayer insulating film interposed therebetween;

forming a **[[DLC]] diamond-like carbon** film to cover the pixel electrodes;

forming an insulating layer on the **[[DLC]] diamond-like carbon** film;



planarizing the insulating layer so that a surface of the **[[DLC]] diamond-like carbon** film and a surface of the insulating layer become flush with each other, thereby filling boundary portions between the pixel electrodes with the insulating layer; and  
forming a liquid crystal layer over the insulating layer.

94. (Previously Presented) The method according to claim 93, wherein mechanical polishing is performed in the planarizing step.

95. (Previously Presented) The method according to claim 93, wherein the insulating layer is light interruptive.

96. (Previously Presented) The method according to claim 93, wherein the insulating layer is an organic resin film in which at least one of a black pigment and a carbon-type material is dispersed.

97. (Previously Presented) The method according to claim 93, wherein the semiconductor elements are thin-film transistors.

98. (Currently Amended) The method according to claim 93, further comprising a step of planarizing the pixel electrodes before the step of forming the **[[DLC]] diamond-like carbon** film.

99. (Currently Amended) The method according to claim 93, wherein the **[[DLC]] diamond-like carbon** film has a thickness of 10 to 50 nm.